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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,762

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Peter Asplund

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EXAMINER

CHAUDHRY, SAEED T

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

09/23/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary	Application No. 10/572,762	Applicant(s) ASPLUND ET AL.	
	Examiner Saeed T. Chaudhry	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 and 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 4, 2009 has been entered.

Newly submitted claims 21-27 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 21-27 are drawn to a method of washing a gas turbine unit. This invention has separate status in the art and prior art used for apparatus claims are not applicable to this invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 21-27 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 1 and 15 recite limitations “one or more orifice opening” render the claims indefinite and confusing since it is not clear that if there is only one orifice opening, then how this is intersected at a distance within a range of 5-30 cm and orifice openings spray angle in the range of 0-80°.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

Claims 1-7 and 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jones.

Jones (2,235,258) discloses a nozzle having an intake end (5) and an outlet end (E) for wash liquid, a number of orifices (7) connected to outlet with respective orifice opening; wherein respective orifices are directed at an angle towards a center axis (C) at a junction point at a distance and wherein the orifice opening sized so that liquid from the respective orifice openings at a spray angle that is within an angle range of 0-80° degrees.

It would have been obvious at the time applicant invented the claimed nozzle to arrange the orifices to intersect the streams within a range of 5-30 cm with routine experimentation for the purpose of impinging the surface at specific distance. The nozzle disclosed by Jones is capable of passing wash liquid, use with the pressure and liquid

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velocity as claimed herein. The stream emanating from the orifice has zero degree angle, which read on the claimed limitation.

It should be noted that no patentable weight has been given to the preamble/intended use in that the body of the claim fails to recite any limitations that give life and meaning to the preamble/intended use. See MPEP 2111.02.

Claims 1-7 and 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lauderback et al.

Lauderback et al. (2,928,611) discloses a nozzle having an intake end (8) and an outlet end (E) for wash liquid, a number of orifices (25) connected to outlet with respective orifice opening; wherein respective orifices are directed at an angle towards a center axis at a junction point at a distance and wherein the orifice opening sized so that liquid from the respective orifice openings at a spray angle that is within an angle range of 0-80° degrees.

It would have been obvious at the time applicant invented the claimed nozzle to arrange the orifices to intersect the streams within a range of 5-30 cm with routine experimentation for the purpose of impinging the surface at specific distance. The nozzle disclosed by Lauderback et al. is capable of passing wash liquid, use with the pressure and liquid velocity as claimed herein. The stream emanating from the orifice has zero degree angle, which read on the claimed limitation.

It should be noted that no patentable weight has been given to the preamble/intended use in that the body of the claim fails to recite any limitations that give life and meaning to the preamble/intended use. See MPEP 2111.02.

Response to Applicant's Arguments

Applicant argued that neither Jones nor Lauderback disclose an “atomizing” feature nor a spray angle of 0-80°.

This argument is not persuasive because the claimed invention does not specify any structural differences which requires liquid to be atomize. Further, atomizing is an intended use of the apparatus. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Jones and Lauderback clearly show orifices at angle between 0-80°.

Applicant argued that neither Jones nor Lauderback would experiment with junction distances, as none are concerned with atomization of droplets, but are instead aimed at achieving other features.

This argument is not persuasive because claims apparatus require to have orifices which intersect in front of the nozzle and orifices opening spray angle between 0-80°, which are shown by the Jones and Lauderback. Note that the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, (see *In re Casey*, 152 USPQ 235 (CCPA 1967)). Further, Lauderback discloses 30° angle of the spray as shown in fig. 2 and col. 5, line 41. There is no limitation for diameter of nozzle in the claimed apparatus. Lauderback discloses nozzle with 30° angle. Therefore, nozzle having diameter in which orifices intersect at 5 cm read on the claimed apparatus.

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Applicant argued that Jones requires a junction point that, particularly speaking, is far less than the Applicants' range. According to Jones, the distance at which liquid stream exiting its nozzle orifices are to combined must be less than twice the diameter of the orifice.

This argument is not persuasive because orifice diameter having 2.5 cm read on the claimed apparatus, since there is no limitations in the claimed apparatus that the diameter of the orifices can not 2.5 cm. Using the apparatus in a turbine is an intended use, which does not carry any weight in the apparatus.

The applicant argued that Jones fails to disclose a spray angle of 0-80°. Instead, Jones merely discloses a 0° spray angle. Those of skill in the art would understand that 0° of Jones is necessary to ensure uniformity of water of water droplets and to ensure that the desire shaped stream is produced.

This argument is unpersuasive since Jones clearly shows in fig. 2 orifices angle between 0-80°.

Applicant's arguments filed August 4, 2009 have been fully considered but they are not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Saeed T. Chaudhry

Patent Examiner

/Michael Barr/

Supervisory Patent Examiner, Art Unit 1792